Reed-Muller Workshop
May 24 – 25, 2017
Novi Sad, Serbia

PROVISIONAL PROGRAM

Wednesday, May 24
19:30 – 20:30  Invited Address – Dr. Elena Dubrova

Thursday, May 25
08:50 – 09:00  Opening Remarks – R. Stanković

09:00 – 10:15  Session 1

Compact XOR-Bi-Decomposition for Generalized Lattices of Boolean Functions, Bernd Steinbach and Christian Posthoff

Enumeration and Coding methods for a class of Permutations, Costas Karanikas and Nikolaos Atreas

Cryptographic Applications of the Reed-Muller Spectrum, Mitchell Thornton and Michael Miller

10:15 – 10:45  Refreshment Break

10:45 – 12:00  Session 2

Boolean Bent Functions Classification in the Spectral Reed-Muller Domain, Miloš Radmanović and Radomir Stanković

Boolean function classification with δ-swaps, Mathias Soeken, Ina Kodrasi and Giovanni De Micheli

A Correction of Walsh Spectral Classification of Boolean functions for n ≤ 5, Milena Stanković, Claudio Moraga and Radomir Stanković
12:00 – 13:30  **Lunch**

13:30 – 14:45  **Session 3**

*Fundamental Symmetric Boolean Functions and Reed-Muller Spectra*, Claudio Moraga

*BDD and FDD Size Optimization by Genetic Algorithm*, Suzana Stojkovic, Darko Velickovic and Claudio Moraga

*Cycle structures of the reversible hidden weighted bit function*, Krzysztof Podlaski

14:45 – 15:15  **Refreshment Break**

15:15 – 16:05  **Session 4**

*Optimal MCT Circuits of Reversible Adder-Subtractors and Quantum Gate Realization*, Md Belayet Ali, Takashi Hirayama, Katushisa Yamanaka and Yasuaki Nishitani

*Analytic Sifting Algorithm*, Martin Lukac, Pawel Kerntopf and Michitaka Kameyama

16:05 – 16:15  **Break**

16:15 – 17:00  **Plenary Session** – Reed-Muller – Past, Present and Future

The session will begin with a brief overview of the contributions described in the following survey papers included in the workshop record:

*Early work in Switching Theory and Logic Design of Gavrilov School in former Soviet Union*, Anatoly Shalyto, Radomir Stanković, Jaakko Astola and Alexander Strukov

*A Selected Bibliography on Reed-Muller Representations and Related Topics*, Radomir Stanković and Dragan Janković